

New Hawaiian Lepidoptera

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While making studies on the insect faunas of the native forest trees of the high plateau of Kauai in the vicinity of the Kokee summer camps in June and July, 1932, several new moths were discovered, which are herein described. These were all reared from larvae found in their respective natural habitats. This is an indication of the possibilities of the discovery of more new species when there is further opportunity for research in that region. A new moth from the Waianae Mts., Oahu, and some notes on a few other Hawaiian moths are herewith included. Types of the new species are deposited in the collection of the Hawaiian Entomological Society.

PHYCITIDAE

Homoeosoma bidensana n. sp.

Male, 17 mm., female, 18-27 mm. Whole insect nearly uniformly brownish fuscous. Forewing having two oblique bars of white scales, one arising at about 1/5 of costa and extending obliquely to about middle of dorsum, the other arising at about 4/5 of costa and extending obliquely across wing parallel to termen. Sometimes a suffusion of white scales on part of the middle of wing between the white bars, and also near termen. Veins 4 and 5 of forewings coincident as in *humeralis*. Very distinct from other Hawaiian species of the genus.

Described from 1 male and 3 females reared from larvae boring in the stems of *Bidens cosmoides*; pupation takes place within the stem.

Hab.—KAUAI, Kumuwela, June 25 and July 15, 1932; Nualolo, June 26, 1932 (Swezey).

PYRAUSTIDAE

Phlyctaenia violae n. sp.

Male, 20 mm. Antennae brownish fuscous, with some white scales on basal joint. Palpi with brownish fuscous and white scales mixed. Head white, with a fuscous median spot on frons and a few fuscous scales on

occiput. Thorax brownish fuscous on disk, patagia and apex ochreous. Forewings white on disk; basal fourth with a slight suffusion of fuscous; a heavy fuscous bar obliquely from about $1/5$ of costa extending $2/3$ towards dorsum, widened distally, from distal end two fuscous sinuate lines wide apart extend to dorsum; costa fuscous except for two white spots enclosing a fuscous spot at $2/3$, from this spot a sharply sinuous fuscous line extends to vein 2; 8-shaped discal spot outlined with fuscous, heavier on costal side; a series of fuscous dots on termen, preceded by a slight fuscous suffusion which is more dense near apex; cilia fuscous and white mixed, entirely fuscous at base. Hindwings nearly uniformly light fuscous, with a darker discal dot and an indistinctly indicated postmedian fuscous line; cilia white, fuscous at base. Abdomen light fuscous with indications of white rings on apical margins of segments. Legs fuscous, tibiae white at apex and tarsi white spotted.

Reared from a caterpillar on leaves of *Viola* sp. (a native species of violet). Three caterpillars were found, but two proved to be parasitized. Of the latter, one died before the parasite larva obtained its growth, and from the other a parasite larva issued, spun its cocoon and eventually matured as *Cremastus hymeniae* Viereck. This adds another to the long list of hosts of *C. hymeniae*.

The full-grown *P. violae* larva was 20 mm.; light green, with white longitudinal dorsal fat bodies showing through. Head plate testaceous with slight browning on the sides, eyes black. A black longitudinal bar on each lateral margin of cervical plate. The larva spun up between leaves, and the pupa was formed February 19, from which the adult moth issued March 3, 26 days from the date of capture, February 5.

Hab.—OAHU, Puu Kanehoa, Waianae Mts., Feb. 5, 1933 (Swezey).

Phlyctaenia platyleuca Meyr.

One moth was reared from a larva on leaves of *Urera sandwicensis*, Kamokuiki Valley, Waianae Mts., April 2, 1933. Larvae were quite numerous on the trees, the latter being quite numerous and larger than I had observed elsewhere. A species of *Sierola* was present. A caterpillar was found on which 3 *Sierola* larvae had just finished eating. They spun cocoons, but died without maturing. Three *Casimaria infesta* (Cress.) larvae issued from as many caterpillars and produced cocoons, from which the adults issued April 20. The only previous rearing of this species of *Phlyctaenia* was from *Touchardia latifolia* on Mt. Tantalus, 1908 and 1909. This is a closely related tree.

TORTRICIDAE

Capua pterotropiana n. sp.

Male, 16-17 mm. Antennae cinereous, strongly banded with brownish fuscous above, a few of the basal segments entirely brownish above; scape white with a few scattered brownish scales above or entirely brownish above. Palpi white, first and second joints brownish fuscous externally except at apex of second joint, terminal joint whitish or sometimes with scattered fuscous scales. Head white, with a few pale brownish scales posteriorly. Thorax brownish, with mixture of yellow, green and fuscous scales; patagia brownish tipped with white. Forewings pale greenish white with patches of fuscous brown: a patch occupying about basal fourth of wing and containing a few greenish scales at base dorsally; a large irregular triangle with its base occupying costa from about $1/3$ to $3/4$, its apex on fold with a projection towards tornus, some greenish scales near costa in middle of base; a row of marginal spots on dorsum and termen and apical part of costa, some of these spots larger, particularly one about middle of dorsum and one about middle of termen; a pair of white spots on costa at $1/3$, another pair at $2/3$ and another pair towards apex; terminal cilia tawny greyish. Costal fold extends to the beginning of the base of large triangle, white at tip and a larger white patch a little before tip. Hindwings and cilia tawny greyish. Abdomen tawny greyish, anal tufts ochreous. Fore and middle legs fuscous with pale bars; hind legs tawny greyish.

Female, 22-24 mm. Similar to male but larger; disc of thorax mostly pale greenish; the basal brown patch of forewing is divided longitudinally by a greenish patch; an oval brown spot in middle before termen.

Described from 2 males and 6 females reared from larvae in terminal buds of *Pterotropia kauaiensis*. Apparently allied to *Capua* (?) *glaucoviridana* Walsm., which was described from a single female from Kaholuamano, Kauai, but larger than it in size and the brownish patches are more distinct and larger in size.

Hab.—KAUAI, Halemanu, June 22, 1932 (Swezey).

Capua oheoheana n. sp.

Male, 9-10 mm. Antennae cinereous, banded with dark fuscous above. Palpi cinereous, fuscous externally, terminal joint short almost entirely fuscous. Head and thorax brownish fuscous. Forewings variegated, mostly brownish fuscous; a pair of whitish costal spots at about $1/3$ and another pair at about $2/3$, from the first pair of spots a band with somewhat of whitish suffusion crosses the wing, the basal portion before this band is somewhat suffused with orange scales; a few orange scales scattered throughout the wing, a scattering of silvery white scales throughout; cilia fuscous; no costal fold. Hindwings and cilia dark fuscous. Abdomen fuscous, anal tufts pale. Legs mostly cinereous, banded with fuscous.

Female, 11 mm. Similar to male, except that the whitish band from $1/3$ of costa is more distinct and wider, twice as wide on dorsum as on costa, having a few ochreous scales; another similar band from $2/3$ of costa obliquely to tornus, with a projection to near apex of costa, thus making a

Y-shaped area or spot. Distinctly different from other Hawaiian species of *Capua*.

Described from 4 males and 1 female, collected and reared from *Pterotropia kauaiensis*, larvae and pupae found in dead twigs. The name is from "ohe ohe," the native name of the tree. As treated in the Fauna Hawaiiensis, this species would fall in the genus *Epagoge* on account of the absence of costal fold in the male. However, Meyrick, in the Revised Handbook of British Lepidoptera (1928) in the description of *Capua*, says: "Forewing of male with or without costal fold," and places in the genus *Capua* the species which were under *Epagoge* in his Handbook of British Lepidoptera, of 1895. Hence, it might be inferred that *Epagoge* is to be considered as synonymous with *Capua*.

Hab.—KAUAI, Halemanu, June 29, 1932 (Swezey).

TORTRICIDAE

***Eulia lysimachiae* n. sp.**

Male, 17 mm. Head and thorax not in perfect condition, but apparently nearly uniformly tawny greyish. Forewings tawny greyish, with faint fuscous strigations; at 1/5 of costa a larger or more conspicuous one extends about 1/4 across the wing; at 1/3 of costa a broad fuscous band extends obliquely to the fold; on costa beyond this, two large fuscous spots followed by a few smaller ones before the apex; dorsally from the two large costal spots are two other fuscous spots, one oval, the other larger and irregular in outline, they tend to be connected; terminal area with brownish suffusion, widest a little beyond apex and narrowing to termen; a narrow costal fold on basal fourth of costa. Cilia of termen ochraceous, with some fuscous scales towards apex. Hindwings tawny cinereous with numerous small faint fuscous spots and strigulae; cilia cinereous. Abdomen tawny greyish. Fore and middle legs fuscous; hind legs paler.

Described from one male reared from larva on leaves of *Lysimachia hillebrandi* var. *venosa*.

Hab.—KAUAI, Kalalau Trail, about 3800 ft. elevation, June 23, 1932 (Swezey).

EUCOSMIDAE

***Crocidosema marcidellum* (Walsm.)**

One specimen of this moth was reared from a larva found boring in a petiole of leaf of *Abortopetalum sandwicense* in Makaha Valley, 1850 ft. elevation, March 30, 1933, by Mr. Glenn Russ. Five specimens were reared from the same plant in Kamokuiki

Valley, about 2000 ft. elevation, Waianae Mts., April 13, 1933 (Swezey and Williams). The petioles in which larvae are boring become considerably swollen. The only previous rearing of this moth was from fruits of *Hibiscus arnottianus* on Mt. Tantalus, 1914 and 1924 (Swezey).

DIPLOSARIDAE

Bubaloceras pritchardiae n. sp.

Male, 21 mm. Antennae brownish ochreous, more intensely so on the widened curved basal joint. Palpi whitish ochreous. Head and thorax brownish ochreous, head whitish ochreous in front, patagia with whitish margins, collar whitish, some whitish scales at apex. Forewings brownish ochreous, with a few scattered fuscous scales, some of them arranged in obscure dots; one elongate about middle of cell, two on fold, and one at discocellulars; cilia brownish ochreous, paler towards dorsum. Hindwings and cilia cinereous, apical cilia brownish ochreous. Abdomen cinereous, anal tufts concolorous. Legs cinereous, somewhat infuscated dorsally.

Female, 22 mm. Similar to male except for sexual characters.

Described from one male and three females (2 cripples) reared from larvae feeding in the abundant fulvous cottony tomentum, with which the spathe and other parts of inflorescence of *Pritchardia eriphora* is clothed. The moths are about the color of this cottony substance. Distinct from the only other known species of the genus, which is nearly white, and occurs on Molokai. The large curved and widened basal joint of the antenna with its hair pecten determines the genus.

Hab.—KAUAI, Kumuwela, July 1, 1932 (Swezey).

GRACILARIADAE

Parectopa ureraella (Swezey)

Mines of this moth were found abundant in leaves of *Urera kaalae* near Puu Kaua, Waianae Mts., Nov. 6, 1932. A few specimens were reared. They vary slightly from those that have been reared previously from *Urera sandwicensis* on Mt. Tantalus.

PLUTELLIDAE

Acrolepia aiea n. sp.

Male, 8 mm. (undersized from lack of food). Antennae whitish, strongly banded with black. Palpi whitish ochreous, with wide fuscous band on median segment externally and two fuscous bands on terminal segment

externally. Head whitish ochreous, with a few fuscous scales at base of antennae. Thorax ochreous and fuscous mixed. Forewings ochreous, fuscous and white, the fuscous scales with a tendency to be arranged in strigulae and costal spots, more generally distributed on basal fourth, and on terminal area; the white is chiefly in a wide band directly across wing from about $1/3$ of costa, which is nearly divided by an incomplete line of fuscous scales, there are white costal spots, and a few white scales scattered throughout; terminal cilia fuscous, with a white spot near middle of termen. Hindwings and cilia cinereous fuscous, fading to nearly white on basal half. Abdomen cinereous, anal tufts concolorous. Legs cinereous, strongly barred with fuscous.

Described from a single male reared from mine in leaf of *Nothoestrum latifolium*. Named with the native name of the host tree. Allied to *Acrolepia nothoestri* Busck on Oahu, but the latter lacks the white band on the forewing, though it has a large white spot on dorsum in the position of dorsal end of the white band of forewing of *A. aiea*.

Hab.—KAUAI, Kumuwela, July 15, 1932 (Swezey).